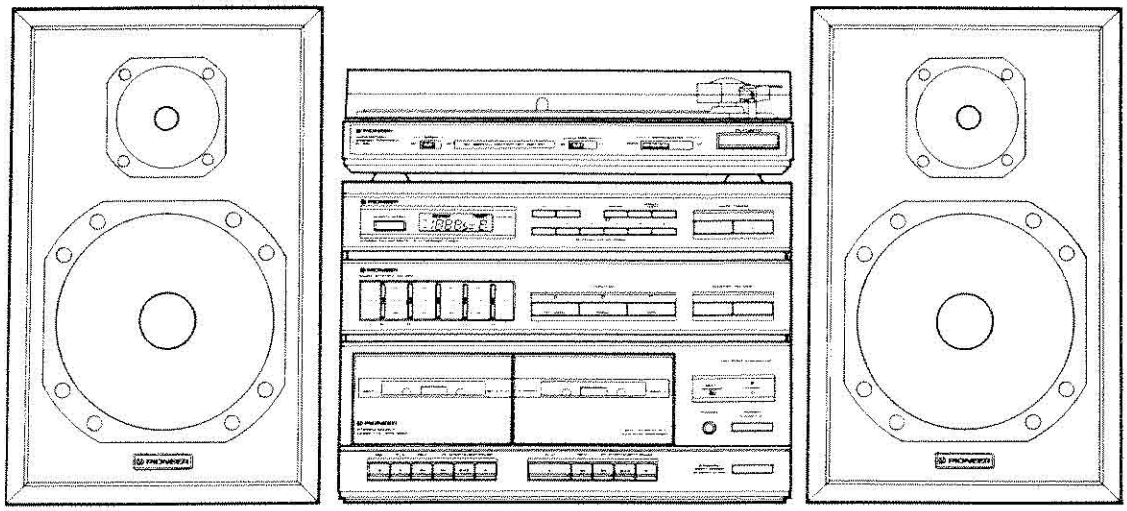
Operating Instructions

MUSIC SYSTEM

MS-Z62

STEREO TURNTABLE

PL-Z82/PL-Z92



The turntable PL-Z82 shown in the illustration is optional.

Thank you for buying this Pioneer product.
Please read through these operating instructions so you will know how to operate your model properly. After you have finished reading the instructions, put them away in a safe place for future reference.
In some countries or regions, the shape of the power plug may sometimes differ from that shown in the explanatory drawings. However, the method of connecting and operating the unit is the same.

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The future of sound and vision.

IMPORTANT 1

The lightning flash with arrowhead, within an equilateral triangle, is intended to alert the user of the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

CAUTION:
TO PREVENT THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

The exclamation point within an equilateral triangle is intended to alert the user of the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

IMPORTANT 2

If the apparatus is fitted with AC mains power outlet(s), see REAR PANEL FACILITIES for convenient connection of additional Hi-Fi component(s). Make all connections to the AC outlet(s) and the signal terminals first. Connect the plug to the wall socket last, make sure that the power switch is off.

FOR USE IN THE UNITED KINGDOM

The wires in this mains lead are coloured in accordance with the following code.

Blue	Neutral
Brown	Live

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured marking identifying the terminals in your plug proceed as follows:
The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black.
The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.
Equipment sold in the U.K. is not supplied with a power plug.

COPYRIGHT — IMPORTANT

It is an infringement of copyright to copy records and pre-recorded cassettes or to re-record them in any form without the permission of the owners of the copyrights concerned.

"This product is manufactured to comply with the radio interference requirements of EEC Directive 76/889/EEC and 82/499/EEC."

FEATURES

- High power output
- 5-band graphic equalizer
- Remote control
- Stereo double cassette tape deck
- Synchronized copy start
- High-speed copy
- Relay play
- Auto recording level
- DIGITAL synthesizer FM/AM tuner
- Up to 12 stations preset (FM-6/AM-6 stations)

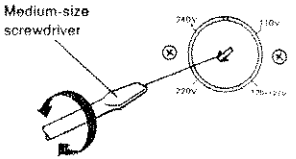
BEFORE OPERATING, CHECK THE POSITION OF THE SWITCHES

LINE VOLTAGE SELECTOR SWITCH

Only multi-voltage models are provided with this switch. U.S., Canadian, European, and U.K. models are not provided with this switch.
Main voltages in Saudi Arabia are 127V and 220V only. Never use this model with 110V setting in Saudi Arabia.

The line voltage selector switch is on the rear panel. Before your model is shipped from the factory, this switch is set to the power requirements of the destination. Check that it is set properly before plugging the power cord into the AC wall socket. If the voltage is not properly set or if you move to an area where the voltage requirements differ, adjust the selector switch as follows.

1. Disconnect the power cord.
2. Use a medium-size screwdriver.
3. Insert the screwdriver into the groove on the voltage selector, and adjust so that the tip of the arrow points to the voltage value of your area.



AM/FM CHANNEL STEP SWITCH

This switch is not provided on models for Europe, U.K., North America or Saudi Arabia.
The CHANNEL STEP switch is located on the rear panel. Before the tuner leaves the factory, this switch is set to the channel allotment plan of the area in which the tuner is sold. When the AUTO TUNING switch is given a single push, the frequency display will change in the following units.

[100 kHz/10 kHz] position:
Set to this position for areas with FM reception step of 100 kHz and AM 10kHz.

[50 kHz/9 kHz] position:
Set to this position for areas with FM reception step of 50 kHz and AM 9 kHz.

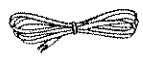
NOTE:
If the switch is set to the wrong position, correct tuning will not be possible.

Consult your dealer if you are not sure about the channel allotment plan in your area.

CHECKING ACCESSORY ITEMS

Remote control unit

Size "AAA" (IEC R03/UM-4) 1.5V dry cell batteries


FM T-type antenna

EFORE OPERATION

:MOTE CONTROL UNIT

Remove the cover of the battery compartment on the reverse side of the remote control unit.

Take out the two size "AAA" [IEC R03 (UM-4)] dry cell batteries supplied and load them into the battery compartment, taking care to follow the markings on the compartment.

Replace the cover of the battery compartment.

utions for handling dry cell batteries.

using dry cell batteries can result in electrolyte leakage or losions. Bear in mind the following points for getting the most of your batteries.

When loading the batteries into the battery compartment, make sure the plus ⊕ and minus ⊖ polarities correspond to the markings on the compartment.

Even though they may be the same shape, batteries come with different voltage ratings. Do not mix or use different types of batteries together. Use only the same kind of batteries.

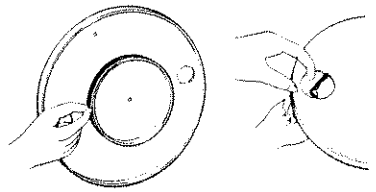
Do not mix up new batteries and used batteries but replace all the batteries at the same time.

Do not heat up, disassemble or short-circuit batteries or throw them into a fire.

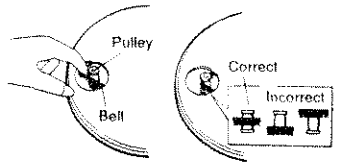
SET-UP FOR OPTIONAL PL-Z82/PL-Z92 TURNTABLE

1. **Check the parts.**

2. **Pinch belt on inner rim between thumb and forefinger.**



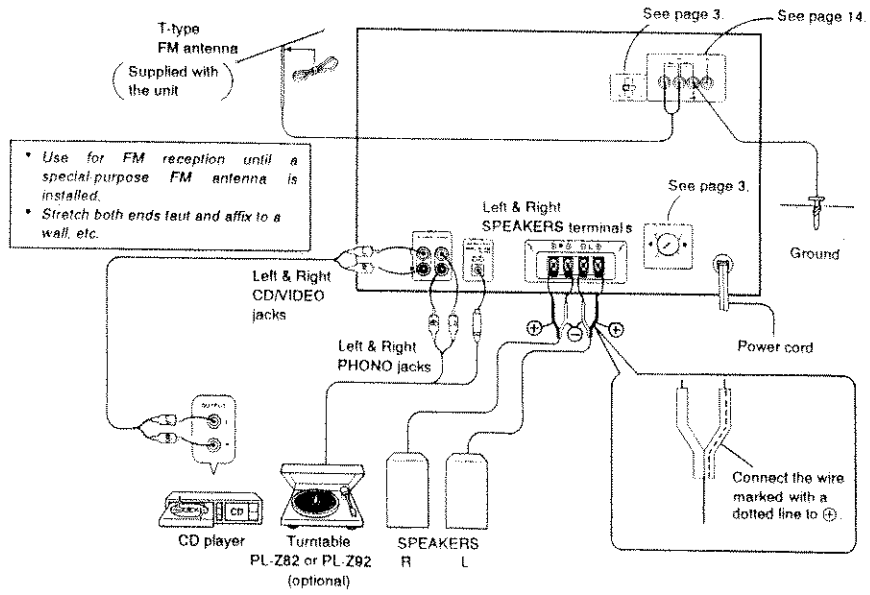
3. **Slip belt over thumb and pull out, inserting thumb in hole.**
4. **Insert forefinger from top of platter and transfer belt to forefinger.**
5. **Lower platter onto spindle.**
6. **Release belt onto pulley.**



7. **Place the platter mat on the platter.**
8. **Remove the vinyl band holding the tonearm.**
9. **Remove the tonearm from the arm rest.**

10. **Remove the stylus cover.**

CONNECTIONS


T-type
FM antenna
(Supplied with the unit)
• Use for FM reception until a special-purpose FM antenna is installed.
• Stretch both ends taut and affix to a wall, etc.
See page 3.
See page 14.
See page 3.
Left & Right SPEAKERS terminals
Ground
Left & Right CD/VIDEO jacks
Left & Right PHONO jacks
Power cord
Connect the wire marked with a dotted line to ⊕.
CD player
Turntable PL-Z82 or PL-Z92 (optional)
SPEAKERS R L

Antenna ground

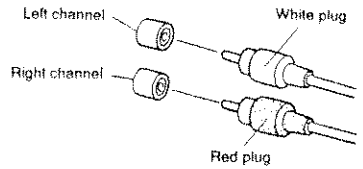
Although grounding is not necessary for reception it is recommended for protection against damage from lightning if an outdoor FM antenna is used. Grounding is recommended as well to help reduce noise and hum.

NOTE:
Never make the ground connection to a gas pipe as sparks could cause the gas to ignite.

Speaker Impedance

Use speaker systems with an impedance ranging from 4 Ω .

Connecting the input cords

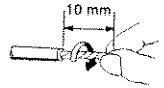


When another stereo component (purchased separately) is connected, note the following instructions:

- Connect the plugs properly. Faulty connections can cause noise and also breakdowns and failures.
- The white terminal is for the left channel and the red terminal is for the right channel.

CONNECTING SPEAKER WIRES

1. **Twist the tip of the wire.**

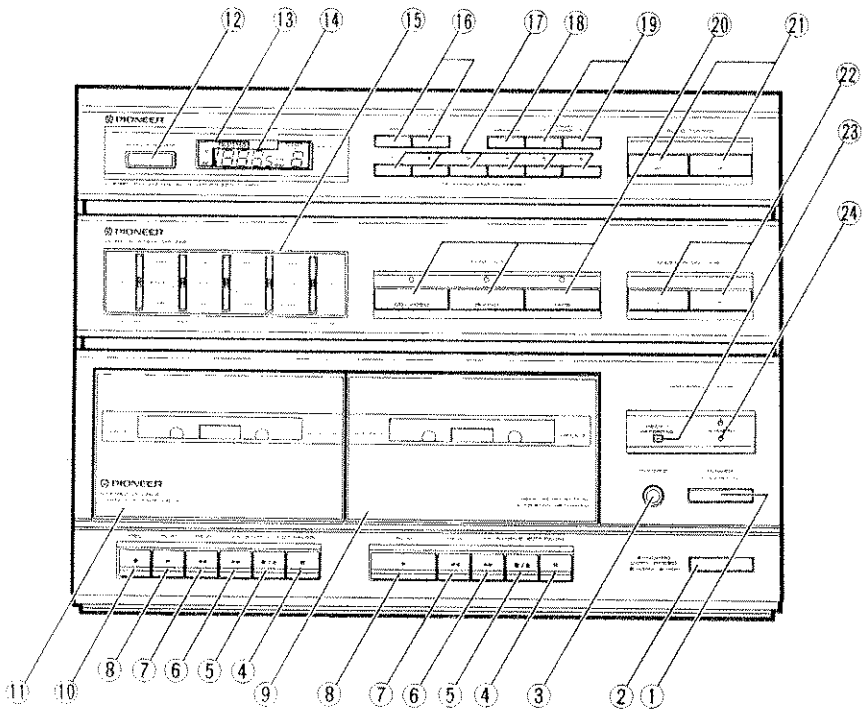


2. **Push the lever and insert the cord into the opening.**

3. **Release the lever and pull the cord to see that it is connected properly and securely.**

NOTE:
Do no allow any of the cord conductors to protrude from the terminals or touch any other conductors. Malfunctioning or break-downs may occur when conductors come into contact with each other.

RONT PANEL FACILITIES



ssette tape deck receiver

'OWER (STANDBY/ON) switch

he accessory remote control unit can also be used to operate
is switch's STANDBY/ON function.
he POWER switch selects the transformer's secondary even
STANDBY position. The unit's circuitry will work as long as
e power cord is connected to a power outlet.
/hen not using the unit for a long period, disconnected the
ower cord.

E:
/hen the power cord is connected to a wall outlet, the unit is in
TANDBY condition.
/hen the power is turned on in this state, FUNCTION AM is
elected.

② SYNCHRO COPY SPEED switch

■ NORM (Normal) :

Normal-speed copying (Permits you to listen to playback normally.)

▬ HIGH :

High-speed copying (double-speed, halftime copying)

③ PHONES jack

This is "standard plug-type jack" for headphones.

NOTE:
Sound is not heard from the speakers when headphones are in use.

④ PAUSE (❚❚) button

Temporarily stops tape travel. Cancels pause mode when pressed again.

⑤ STOP/EJECT (■/▲) button

Stops tape travel. Ejects cassette if pressed when tape is stopped.

⑥ FF (►►) button

Fast forward

⑦ REW (◄◄) button

Rewind

⑧ PLAY (►) button

Playback

⑨ DECK II compartment

⑩ REC (●) button

Record

⑪ DECK I compartment

⑫ REMOTE SENSOR window

⑬ INDICATORS

FM STEREO:

This lights during FM stereo reception.

FM:

Lights when the FM Band switch is pressed to select FM.

AM:

Light when the AM Band switch is pressed to select AM.

⑭ FREQUENCY (PRESET NUMBER) display

⑮ Graphic equalizer controls

The equalizer is divided into five frequency ranges (100 Hz, 330 Hz, 1 kHz, 3.3 kHz, 10 kHz) to adjust music to the individual taste of the listener.

NOTE:
Effective only for audio playback. Does not work for recording and copying operations.

⑯ Band selector switches (FM, AM)

This is used to select the band of the desired station. When CD/VIDEO, PHONO or TAPE function is selected and one of these switches is pressed, the unit changes to tuner function.

⑰ STATION PRESET switches

These are used to recall preset broadcasting stations and to preset the station.

⑱ MEMORY switch

This switch is used to preset stations. When the switch is pressed, the PRESET No. display will flash. To preset the frequency of any station, press the STATION PRESET switches while the station No. display is flashing.

⑲ MANUAL TUNING switches

When the "+" side is pressed once, the frequency is raised one step. When the " – " side is pressed once, the frequency is lowered one step.
When the "+" side is kept pressed, the frequency increases and when the " – " side is kept pressed, it decreases.

⑳ FUNCTION switches/indicators

The indicators light for the specified functions.

TAPE:

Press when listening to a cassette tape.

PHONO:

Press when playing records on a turntable connected to the PHONO jacks.

CD/VIDEO:

Press when listening to a CD player or VCR connected to the CD/VIDEO jacks.

㉑ AUTO TUNING switch

When the "+" side is pressed, the frequencies are scanned in ascending order; when the " – " side is pressed, they are scanned in descending order. Scanning stops as soon as a station has automatically been tuned in.

㉒ MASTER VOLUME switches

This switch is pressed to adjust the volume.

+:

Increases volume.

– :

Decreases volume.

When one of the two switches is pressed with the MUTING ON, muting is released.

㉓ DECK I RECORDING indicator (REC)

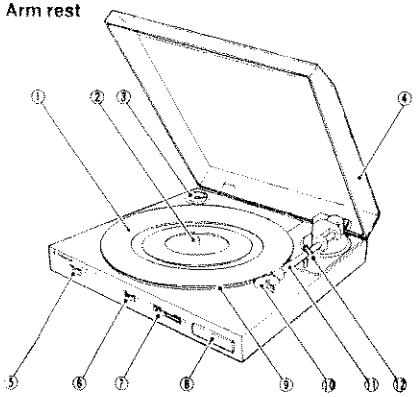
Lights during recording.

㉔ STANDBY indicator

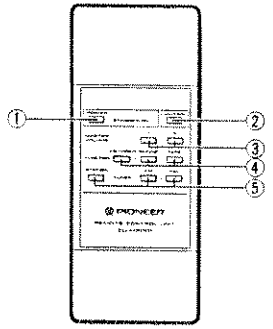
This indicator lights in standby status when the power cord is connected to a power outlet.

rntable:PL-Z92/PL-Z82 (Optional)

Platter mat
Platter spindle
EP adaptor
Dust cover
SPEED switch
this switch in accordance with the speed of the record.
33-1/3 rpm records.
45 rpm records.
TE:
sure to press the switch firmly when starting play-back;if not ssed firmly, the platter may rotate without the tone arm moving.
SIZE switch (only PL-Z92)
this switch in accordance with the size of the record.
30 cm records.
17 cm records.
TE:
Z82 is not equipped with SIZE switch.
ARM-ELEVATION switch
Use the switch for manual play.
Use the switch to suspend record play temporarily.
Use the switch when changing the tracks during actual play.
tone arm rises (the stylus moves away from the record.)
WN:
tone arm descends (the stylus is lowered onto the record.)
PLAY/STOP switch (only PL-Z92)
ss this switch when starting auto play or when stopping play.
STOP switch (only PL-Z82)
ss this switch when stopping play.
Platter
Cartridge
Tone arm
Arm rest



Remote control unit



① **POWER (STANDBY/ON) key**
② **MUTING key**
Use to temporarily cut sound volume.
To return to the set volume level press this key again or operate the MASTER VOLUME key.

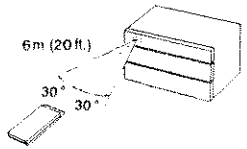
③ **MASTER VOLUME (+: UP, – : DOWN) key**
④ **FUNCTION selector keys**
⑤ **TUNER keys**
AM, FM Band selector keys:
NOTE:
When CD/VIDEO, PHONO or TAPE function is selected and one of these keys is pressed, the unit changes to tuner function.
STATION key:
Each time this key is pressed the next preset station is called in numerical order.

Range of remote control

When the remote control unit is pointed at the REMOTE SENSOR window on the deck receiver and any of its keys is pressed, the cassette deck receiver and other components can be operated by remote control.

Distance:
Within a range of approximately 6 meters from the REMOTE SENSOR window.

Angle:
Within approximately 30 degrees from the center of the REMOTE SENSOR window.
Remote control will not be possible if there is an obstacle between the remote control unit and the REMOTE SENSOR window.



GRAPHIC EQUALIZER CONTROLS

The advantage of the GRAPHIC EQUALIZER over conventional tone controls is that with the five controls of the GRAPHIC EQUALIZER it is possible to control five different frequency band. With conventional tone controls a setting for a bass or treble boost or cut will also affect the lower or upper mid frequencies. The frequency bands controlled by the five slide controls have been chosen to yield the maximum possible control action within the audio spectrum.

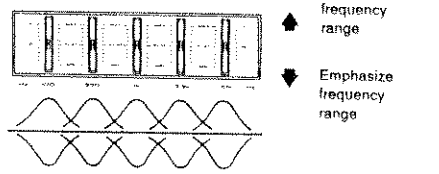
100 Hz:
The 100 Hz control is very useful for enhancing low bass notes as in organ music.

330 Hz:
The 330 Hz control will allow you to vary the upper bass frequencies.

1 kHz:
The 1 kHz control is the presence control and can be used very effectively to emphasize, or de-emphasize vocalists.

3.3 kHz:
The 3.3 kHz control will add brilliance and clarity to brass instruments and violins.

10 kHz:
The 10 kHz control can be used to make up for missing high frequencies absorbed by the environment and to add a natural crispness to music.



OPERATIONS

Switch numbers used in the following explanation refer to the numbers appearing in the FRONT PANEL FACILITIES section on page 6, 7 and 8.

PERFORM THE FOLLOWING PROCEDURES BEFORE STARTING ANY OF THE OPERATIONS.

Select the FUNCTION switches ⑱ or Band selector switches ⑯ before operating any of the equipment.

- To listen to a compact disc or VCR:[CD/VIDEO]
- To listen to a record:[PHONO]
- To listen to cassette tape:[TAPE]
- To listen to FM:[FM]
- To listen to AM:[AM]

When a function key is pressed, the corresponding indicator lights.

RECORD PLAY (Turntable PL-Z82)

1. **Set the FUNCTION switch ⑱ on the amplifier to PHONO.**
2. **Place the record on the platter mat.**
3. **Remove the stylus cover and release the tone arm from the arm rest.**
4. **Set the SPEED switch ⑤.**
5. **Move the ARM-ELEVATION switch ⑦ to the UP position.**
6. **Move the tone arm by hand across the record.**
At this stage, the platter starts to rotate.
7. **Move the ARM-ELEVATION switch ⑦ to the DOWN position.**
8. **Adjust the volume with the MASTER VOLUME switches ⑰ on the amplifier and the tone with the Graphic equalizer controls ⑮.**
9. **To stop the player while a record is being played, press the STOP switch ⑧.**

RECORD PLAY (Turntable PL-Z92)

Auto play :

1. **Set the FUNCTION switch ⑱ on the amplifier to PHONO.**
2. **Place the record on the platter mat.**
3. **Remove the stylus cover and release the tone arm from the arm rest.**
4. **Set the SPEED ⑤ and SIZE ⑥ switches.**
5. **Move the ARM-ELEVATION switch ⑦ to the DOWN position.**
6. **Push the PLAY/STOP switch ⑥ to start record play.**
7. **Adjust the volume with the MASTER VOLUME switches ⑰ on the amplifier and the tone with the Graphic equalizer controls ⑮.**

NOTE:
- *When play is completed, the tone arm will return automatically to the arm rest.*
- *When playing 45 rpm records with large center holes, place the EP adaptor onto the platter shaft.*

8. **To stop the player while a record is being played, press the PLAY/STOP switch ⑥.**
9. **To stop the player while a record is being played, press the STOP switch ⑧.**

anual play:

Set the FUNCTION switch ⑱ on the amplifier to PHONO.

Place the record on the platter mat.

Remove the stylus cover and release the tone arm from the arm rest.

Set the SPEED switch ⑤.

Move the ARM-ELEVATION switch ⑦ to the UP position.

Move the tone arm by hand to the desired position over the record.

Move the ARM-ELEVATION switch ⑦ to the DOWN position.

e tone arm will descend onto the record and playback will start.

Adjust the volume with the MASTER VOLUME switches ㉒ on the amplifier and the tone with the Graphic equalizer controls ⑲.

To stop the player while a record is being played, press the PLAY/STOP switch ⑧.

ISTENING TO THE BROADCASTS

uto tuning :

e electronic tuning circuit inside the cassette deck receiver will omatically search for the station.

Select the desired broadcasting band using the Band selector switch ⑯.

Press the "+" or " - " side AUTO TUNING switch ⑰ for higher or lower frequency.

e frequency will change rapidly during scanning. The auto ing will stop automatically when the station is located.

TE:

hen the auto tuning is in use, reception may not be possible over g distances or when signals are weak. At these times manual ing is recommended.

Adjust the volume with the MASTER VOLUME switches ㉒ and the tone with the Graphic equalizer controls ⑲.

anual tuning :

. Select your desired broadcasting band using the Band selector switches ⑯.

. Press the MANUAL TUNING switches ⑬ to locate the frequency of your desired station.

r step-by-step searching, press the MANUAL TUNING switches ce and release it immediately. For continuous rapid scanning ep the TUNING switch pressed.

3. Adjust the volume with the MASTER VOLUME switches ㉒ and the tone with the Graphic equalizer controls ⑲.

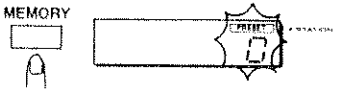
PRESETTING STATIONS

Presetting

From 1 to 6 FM and 1 to 6 AM stations can be preset.

1. Select your desired broadcasting band using the Band selector switches ⑯.
2. Tune in desired station.
   - See the auto tuning section for information on reception using auto tuning.
   - See the manual tuning section for information on reception using manual tuning.
3. Press the MEMORY switch ⑩.

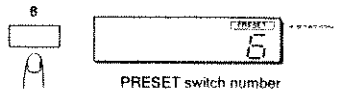
The display will flash (approximately 5 seconds).



4. Press the STATION PRESET switches ⑰.

While the display is flashing, press the switch corresponding to the station which you wish to preset or re-preset.

When presetting a station to No. 6



PRESET switch number

5. Repeat steps 1-4 to program the stations in switches 1-6.

A total of 12 stations (6 FM and 6 AM) can be programmed.

RECEPTION USING PRESET TUNING

1. Select your desired broadcasting band using the Band selector switches ⑯.
2. Press the STATION PRESET switches ⑰ into which the desired station has been preseted.

In this way, simple and accurate reception of any desired station is possible.

NOTE:

- *The contents of the STATION PRESET switches ⑰ will be preserved for several days, even if the power cord is unplugged.*
- *If a preset station has been erased, re-preset it.*

Last Station Memory

- When the POWER switch ① is pressed to turn power on, the last station received before the power was previously turned STANDBY mode will be received again.
- When power is ON, if the Band selector switches ⑯ is pressed, the last station received before the Band selector switch was previously pressed will be received again.

CASSETTE TAPE SECTION OPERATION

With this cassette tape deck, normal tapes are sufficient for recording and playback.

CASSETTE PLAYBACK (DECK I OR DECK II)

1. Set the FUNCTION switches ⑱ to TAPE.
2. Depress a STOP/EJECT (■ / ▲) button ⑤ to open one of the Tape compartments. Then insert a pre-recorded cassette into the tape compartment with the exposed section of the cassette tape facing down. Depress the REW (◄◄) button ⑦ if the tape is not fully rewound onto the left hand hub.
3. To advance the tape in forward direction, depress the FF (►►) button ⑥. Depress the STOP/EJECT(■ / ▲) button ⑤ to release the FAST FORWARD mode and stop the tape.
4. Depress the PLAY (►) button ⑧ and adjust the MASTER VOLUME switches ㉒ and Graphic equalizer controls ⑲.
5. When the end of the cassette is reached, the mechanism will automatically switch off. If it is desired to stop playback before the end of the tape is reached, depress the STOP/EJECT (■ / ▲) button ⑤.

RELAY PLAY (DECK II → I)

It is possible to automatically play back two cassette tapes in sequence, so that on completion of DECK II, DECK I will automatically start playing. The procedure is as follows:

1. Insert pre-recorded cassettes into both tape compartments, with the first cassette to be played in DECK II and the second cassette to be played in DECK I.
2. Make sure that the FUNCTION switches ⑱ is in the TAPE position.
3. Press the PLAY (►) button ⑧ of DECK II.
4. Press the PAUSE (❚❚) ④ and PLAY (►) buttons ⑧ of DECK I.

NOTE:

- *DECK II will now start playing and stops automatically when the end of the tape is reached and DECK I will start. At the end of DECK I its mechanism will also stop automatically.*
- *During relay play DECK II has priority.*
  After both PLAY (►) buttons ⑧ for DECK I and DECK II have been pressed, for playback on DECK I it is necessary to cancel the play mode of DECK II by pressing its STOP/EJECT (■/▲) button ⑤. (DECK I does not start playback if the PAUSE (❚❚) button ④ of DECK II is pressed.)

CASSETTE RECORDING (DECK I ONLY)

1. Depress the STOP/EJECT (■ / ▲) button ⑤ to open the tape compartment. Then insert a tape into the cassette holder with the exposed portion of the tape facing downwards and the tape fully rewound on the left hand hub.
2. Set the FUNCTION switches ⑱ to the source to be recorded. If recording from the radio, first select the required station as described earlier. Adjust the volume to a suitable listening level (the MASTER VOLUME switches ㉒ and Graphic equalizer controls ⑲ settings will not affect the recording in any way.)
3. When ready to record, depress the DECK I REC (●) button ⑩. Recording is now taking place. The REC indicator will light to indicate recording.
4. During recording, it may be desired to omit short pieces of the programme. This is easily achieved by depressing the DECK I PAUSE (❚❚) button ④ during recording. This will stop the tape travel. Depress the DECK I PAUSE (❚❚) button ④ again to resume the recording.

NOTE:
The pause function should not be activated for longer than a minute or two. For longer interruptions use the STOP/EJECT (■/▲) button ⑤.

5. When the end of the tape is reached, the cassette mechanism will automatically stop. In order to stop the recording before the end of the tape, simply depress the DECK I STOP/EJECT (■/▲) button ⑤.

NOTE:
During recording or playback with one of the two decks, do not operate the other.

NCHRO COPY (TAPE COPY)

ote on copyright at the beginning of these instructions.
der to copy from one cassette tape to another follow this
dure:

Set the FUNCTION switches ⑱ to TAPE, insert a blank cassette into DECK I compartment and insert the cassette to be copied into DECK II compartment.

Press the PAUSE (❚❚) ④ and REC (●) buttons ⑩ of DECK I. Then press the PLAY (►) button ⑨ of DECK II. This will release the PAUSE (❚❚) button ④ of DECK I and start the tape copy. When one of the cassette tapes (DECK I or DECK II) reaches its end, the deck will automatically stop. The other deck will continue running either in the recording or playing mode until its tape reaches the end.

NOTE:
You can press the SYNCHRO COPY SPEED switch ② for HIGH speed to make a duplicate of your cassette tape at approximately twice the normal speed. While copying is taking place the unit can still be used to receive from the radio or to play records.

AUXILIARY JACKS (CD/VIDEO)

Your unit has one pair of CD/VIDEO jacks located on the rear panel, to enable the input of signals from other equipment, e.g. external tape deck, video cassette recorders, compact disc players, etc. (For playback with the external unit the Function switches must be set to CD/AUX.) For connection use standard pinplug cords, available at your dealer.

TURNTABLE JACKS (PHONO)

Your unit has one pair of PHONO jacks located on rear panel, to enable the input of signals from a turntable. As turntable please use model PL-Z92 or PL-Z82 as these models are specifically designed for use with this unit.

NOTE:
Use an MM (moving magnet) cartridge.

AINTENANCE

EANING THE HEAD SECTION

heads, capstan and pinch roller are parts which are liable to dirty quite easily. In particular, if the heads are dirty, the high ency components of the sound will not be reproduced and the e balance will be impaired, resulting in a deterioration in d quality. It is therefore recommended that the head section leaned regularly.

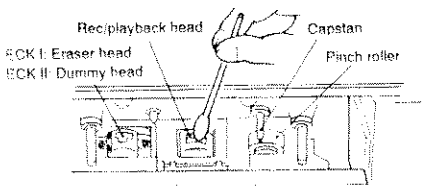
Push the STOP/EJECT (■ / ▲) button ⑤ to open the tape compartment.

Dip a cleaning swab into the cleaning fluid and use it to wipe the heads, capstan, and pinch roller.

EMAGNETIZING THE HEAD

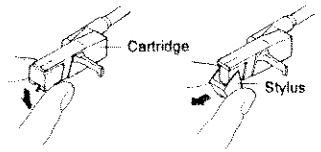
rec/playback head becomes magnetized when you use the deck for prolonged periods of time. This results in noise being erated and the treble dropping off during recording and back. The rec/playback head should therefore be agnetized regularly with a head demagnetizer (sold arately). For further details, refer to the operating instructions mpanying your head demagnetizer.

TE:
Do not hold screwdrivers, metal objects, or magnets close to the heads.
When demagnetizing the heads, be sure the unit's POWER switch ① is in the STANDBY position.



REPLACING THE STYLUS

1. **Remove the stylus gently.**
2. **Attach the new stylus to the cartridge.**



NOTE:
- *The service life of the stylus on the supplied cartridge ranges from 800 to 1,000 hours.*
- *Using a worn or damaged stylus can damage your records and distort the sound reproduction. Remember to replace the stylus at the earliest possible date.*
- *Always use the PIONEER "PN-210" as a replacement stylus.*
- *Always ask for a genuine PIONEER replacement stylus.*

PRECAUTION:

If the turntable is mounted directly on or against a speaker, the vibration from the speaker will be transported to the tone arm's cartridge, thus causing feedback howling. Be sure that speakers are mounted sufficiently separated from the turntable.

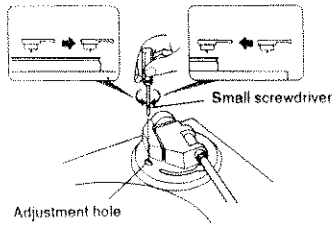
ADJUSTING THE STYLUS DESCENT POSITION (PL-Z92 only)

Proceed as follows when the stylus does not descend at the proper position on the record during auto play. While performing the adjustment, take care not to scratch the record with the stylus.

1. **Place a 30 cm record on the platter.**
2. **SET the SIZE switch ⑥ to "30" and push PLAY/STOP switch ⑧ to start auto play.**

Check the direction and amount of stylus deviation (how many millimeters towards the inside or outside of the record's lead-in-groove).

3. **Push the PLAY/STOP switch ⑧ to return the tone arm to the arm rest.**
4. **Set the ARM-ELEVATION switch to the UP position and manually move the tone arm across the outside edge of the record.**
5. **Rotate the screw with a small screwdriver in accordance with the direction of the deviation observed in step 2.**



- **Rotate the screw clockwise if the stylus descends on the outside of the proper position.**
- **Rotate the screw counterclockwise if the stylus descends on the inside of the proper position.**

6. **Manually return the tone arm to the arm rest and set the ARM-ELEVATION switch to the DOWN position.**
7. **Push the PLAY/STOP switch and check that the stylus descends at the lead-in-groove on the outer circumference of the record. If the position is still not correct, repeat steps 2 to 6.**

MAINTENANCE OF EXTERNAL SURFACES

- Use a polishing cloth or dry cloth to wipe off dust and dirt.
- When the surfaces are very dirty, wipe with a soft cloth dipped in some neutral cleanser diluted five or six times with water and wrung out well, and then wipe again with a dry cloth. Do not use furniture wax or cleaners.
- Never use thinners, benzine, insecticide sprays and other chemicals on or near this unit, since these will corrode the surfaces.

CASSETTE TAPES

Slack or Protruding Tape

If any tape is protruding from the cassette as shown in Fig. A or is slack, the tape may run without passing between the capstan and pinch roller and so may be damaged. Take up any slack by inserting a pencil through the reel hub and turning it as shown in Fig. A. Some tapes have a tape stopper to prevent tape slack. Make sure it is removed before loading the tape into the deck.

Erasure Prevention Tabs

Cassette tapes are provided with erasure prevention tabs (see Fig. B) which act as a protection device to prevent valuable recordings from being accidentally erased. If these tabs are removed with a screwdriver as shown in Fig. B, you will be able to prevent any erasure of programs even if you accidentally set the tape deck to the recording mode by pushing the REC (●) button ⑩. To re-record a tape which has had its tabs removed, cover the tab opening with a double layer of adhesive tape (see Fig. C).

Tips on using cassette tapes

- Leader tape (which does not allow sound to be recorded over it) is provided at the beginning of a cassette tape. Start recording after allowing the tape to run for approximately 5 seconds so that the leader tape clears the recording head.
- Do not leave a cassette tape exposed to the environment. Store the cassette in its case so that dust and dirt do not adhere to the tape after use, and so that the tape is prevented from becoming slack. Choose a location which is not exposed to the effects of magnetism, dust, dirt and oil for storing the tapes.
- Because C-120 tapes are so thin, they easily jam in the pinch roller and capstan, and they are susceptible to other trouble such as irregular winding. Try not to use them with this unit.

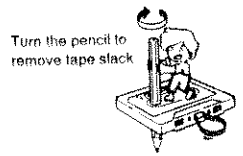


Fig. A

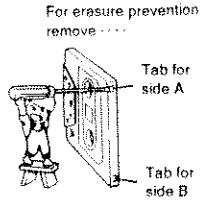


Fig. B

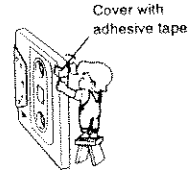


Fig. C

IINTS FOR BETTER RECEPTION

XTERNAL FM ANTENNA

e main advantage of FM over AM is the quality of the broadcast nal. In order to benefit fully from the high signal quality of FM adcasts, it is recommended that a special-purpose FM antenna installed. In weak signal areas, a multi-element (3 element, 5 ment, 7 element) antenna should be used.

M OUTDOOR ANTENNA CONNECTIONS

ere are two ways of connecting the FM antenna to the antenna ut terminals: with a 300 Ω twin-lead feeder or with a 75 Ω axial cable. To get the most from the receiver performance, a 75 coaxial cable is recommended since it is more immune than the n-lead feeder to noise and interference from external sources. If FM antenna has already been erected outdoors, connect it, ferring to the figure.

ROUNDING

ounding is recommended if reception of FM programs is paired by noise. To ground, connect a thick polyvinyl insulated e to the GND terminal and attach the other end to a metal water e or grounding bar or wind it around a copper plate and bury it.

TE:
ver connect a wire to gas pipe for grounding since sparks may ite the gas.

XTERNAL AM ANTENNA

t is not possible to obtain adequate AM reception, a separate door antenna or an outdoor antenna should be installed.

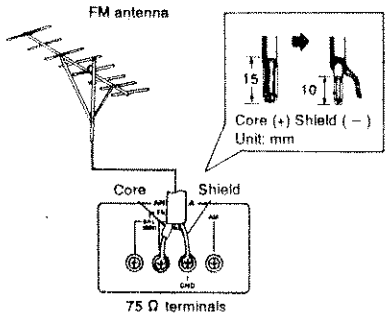
DOOR AM ANTENNA

e a vinyl insulated wire (5 – 6m) and connect one end to the AM tenna terminal and affix the other end to the wall or ceiling, as h as possible.

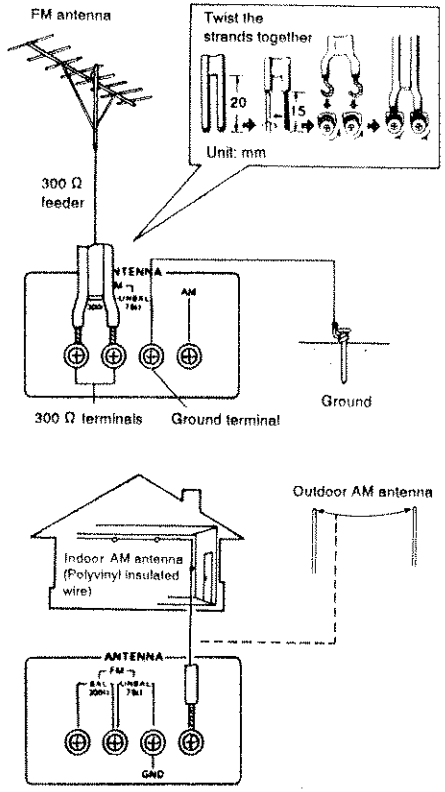
UTDOOR AM ANTENNA

eception quality is not improved sufficiently even when an indoor tenna is used, a vinyl insulated wire should be installed outside d fixed in place.

Connecting the coaxial cable



Connecting the 300 Ω feeder



TROUBLESHOOTING

Incorrect operations are often mistaken for trouble and malfunctions. If you think that there is something wrong with this component, check the points below. Sometimes the trouble may lie in another component. Investigate the other components and electrical appliances being used. If the trouble cannot be rectified even after exercising the checks listed below, ask your nearest PIONEER authorized service center or your dealer to carry out repair work.

Symptom	Probable Cause	Remedy
Amplifier section		
No sound from speakers.	• Is volume level turned down ? • Are headphones connected to the PHONES jack ?	• Increase volume level. • Disconnect the headphones.
Cassette tape deck section		
Tape deck will not work.	• Is deck in pause mode ? • Is tape loaded correctly ?	• Press PAUSE (▮▮) button to release pause mode. • Load correctly.
No sound from tape deck.	• Is FUNCTION switches selected to TAPE ? • Is a blank tape loaded ? • Are heads clean ?	• Set switches to TAPE. • Load a pre-recorded tape. • Clean heads.
Recording not possible.	• Is tape loaded in DECK I ? • Are heads clean ? • Is a tab on the cassette tape removed ?	• Load tape in DECK I for recording. • Clean heads. • Use a cassette tape with tabs, or place a piece of adhesive tape on the back edge (see page 13).
Copying not possible.	Is a tab on the cassette tape removed ?	Use a cassette tape with tabs, or place a piese of adhesive tape on the back edge (see page 13).
Noise picked up during recording of tape, record, radio, etc.	• Is power to TV set turned on ? • Is unit located too close to TV set ?	• Turn off TV set. • Move unit at least from TV set.
Tuner section		
No sound	Is the band selector switch selected to AM or FM ?	Set switches to AM or FM.
AM reception not possible.	Is station tuned in properly ?	Tune in station properly.
FM reception not possible.	Is antenna connected ?	Connect antenna, following instructions on page 14.
Large amount of noise	• Are radio waves weak, causing antenna input to be insufficient ? • Has the connecting cord of the CD player been placed too close to the antenna cable ?	• Use external antenna. • Place the cord of the CD player farther away from the antenna cable or turn off the CD player.
Turntable		
No sound	Is FUNCTION switches selected to PHONO ?	Set switches to PHONO.
Static, scratching noise produced.	• Is record surface dirty ? • Is record warped or scratched ?	• Clean record. • Replace record.

SPECIFICATIONS

Amplifier Section

Peak music power

L + R channels 220W

MUSIC power
1 kHz, T.H.D. 10%, 4 Ω ..... 55W + 55W
Effective maximum output
1 kHz, T.H.D. 10% (EIAJ) ..... 22W + 22W
Frequency Response
PHONO MM ..... 60 Hz to 20,000 Hz (± 3 dB)
CD/VIDEO ..... 60 Hz to 20,000 Hz (± 3 dB)
Hum and Noise (IHF, short circuited, A network)
PHONO MM ..... 60 dB
CD/VIDEO ..... 70 dB
Graphic Equalizer frequency band
..... 100 Hz, 330 Hz, 1 kHz, 3.3 kHz, 10 kHz, ± 8 dB
MUTING ..... – ∞

FM Tuner Section

Frequency range ..... 87.5 MHz to 108 MHz
Usable Sensitivity ..... 26 dBf, IHF (5.6 μV/75 ohms)
Distortion
STEREO ..... 1% (1 kHz)
Signal-to-Noise Ratio (IHF, 60 dBf Input) ..... Mono: 60 dB
Stereo Separation ..... 26 dB (1 kHz)
Antenna Input ..... 300 Ω balanced
75 Ω unbalanced

AM Tuner Section

Frequency range
Saudi Arabia model ..... 531 kHz to 1,602 kHz (9 kHz step)
Other destination models .....
522 kHz to 1,620 kHz (9 kHz step)
520 kHz to 1,710 kHz (10 kHz step)
Sensitivity (Ferrite-bar antenna) ..... 800 μV/m
Antenna ..... Ferrite-bar Antenna

Tape Deck Section

Systems ..... 4 track, 2-channel stereo
Heads ..... Recording/playback head × 1 (DECK I)
Erasing head × 1 (DECK I)
Playback head × 1 (DECK II)
Wow and Flutter ..... No more than 0.2% (WRMS)
Fast Winding Time ..... Approximately 150 seconds
(C-60 tape)
Frequency Response
– 20 dB recording:
Normal tape ..... 63 Hz to 8,000 Hz ± 6 dB
Signal-to-Noise Ratio 40dB

Furnished Parts

FM T-type Antenna 1
Remote control unit 1
Dry cell batteries, Size "AAA" (IEC R03/UM-4) 1.5 V 2
Operating Instructions 1

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Miscellaneous

Power Requirements .....
AC 110/120 – 127/220/240 Volts, 50/60 Hz
Power Consumption 105W
Dimensions (without package) .....
360 (W) × 248 (H) × 321 (D) mm
14-3/16 (W) × 9-13/16 (H) × 12-10/16 (D) in
Weight (without package) ..... 6.5 kg (14lb 5 oz)

Speakers Section

System ..... 2-way 2-speaker system
Loudspeakers:
Woofer ..... 16 cm
Tweeter ..... 6 cm
Nominal Impedance ..... 4 Ω
Maximum input power 30W
Dimensions (without package) .....
245 (W) × 387 (H) × 183 (D) mm
9-10/16 (W) × 15-3/16 (H) × 7-3/16 (D) in
Weight (without package) 1 set ..... 8.8 kg (19lb 6 oz)

Turntable:PL-Z92/PL-Z82 (Optional)

Motor Platter

Motor Type ..... DC servo motor
Drive Method ..... belt drive
Speed ..... 33-1/3, 45 RPM
Speed Variation ..... 0.07% WRMS (JIS) ± 0.10% WTD Peak (DIN)
S/N ..... 63 dB (DIN-B)
Platter ..... 295 mm dia., aluminum die-cast

Tone arm

Type ..... Dynamic balance type, straight tone arm

Installed Cartridge

Type ..... MM Type
Stylus ..... 0.6 mil diamond
Replacement Stylus PN-210
Output voltage ..... 2.5 mV (1kHz, 5 cm/s, Lat. peak)
Tracking Force ..... 2.0 – 3.0g (optimum 2.5g)
Frequency Response ..... 20 Hz to 25,000 Hz
Load Resistance ..... 47 kΩ
Cartridge Weight 4g

Other

Dimensions ..... 360 (W) × 90 (H) × 359.5 (D) mm
14-3/16 (W) × 3-9/16 (H) × 14-1/8 (D) in
Weight
PL-Z92 ..... 2.7 kg (5 lb 15oz)
PL-Z82 ..... 2.7 kg (5 lb 15oz)

Accessories

EP Adaptor 1

NOTE:
Specifications and the design subject to possible modifications without notice due to improvements.

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